

CALIFORNIA INSTITUTE OF TECHNOLOGY
PASADENA

DIVISION OF BIOLOGY

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Dear Rosalind

Leslie, Doc Casper, and I have all read your MS which we think quite good. Thus the following criticisms are only of 2nd degree importance

- 1) I believe Schramm should be given more credit for the sub unit idea - especially his Zeit Natur. 1947 article. I was most aware of his ideas when I reviewed work on T14V

I am also not convinced that Schramm is wrong with regard to the amino acid group

Schramm also was the first person to show aggregation of RNA free subunits [in 1943!!]

- 2) I was not so emphatic about the location of the RNA - I believe I was quite cautious with "ifs" - only said "suggested"

3) Size of sub unit

$$5 \times 10^2 \times 957_0 = 4.5 \times 10^7 / \frac{37 \times 3000}{68} = 35,000$$

So even better than 29,000 { I feel that M.W. = 4×10^7 }

Z. Naturf. 24 (1947)
112-121, 249-257

- 4) I wonder about the 55 Å shell. Your statement about the 6th layer line makes me suspicious that low hydration is the side answer but since I have not seen your F.T., my comment is possibly foolish.
- 5) The argument about the large available surface seems plain to me. Most non aggregated proteins will have a far more accessible surface.
- 6) The Proline remark will probably confuse the non initiated. Needs a diagram to be clear. I would leave it out.

In spite of these criticisms, a very nice summary of TMU status.

with best regards

Jim